

## MONITORING PLAN - MIDDLE WATERWAY (TRUSTEE/CITY)

### PROJECT:

City of Tacoma / NRDA  
Middle Waterway  
Estuarine Resources  
Restoration Project

### LOCATION:

Middle Waterway, Commencement Bay,  
Tacoma, Washington.

### DESIGN OBJECTIVES:

Enhance intertidal area for juvenile salmonid migration.  
Establish marsh vegetation.  
Protect and preserve the site for natural resources.



### CRITERIA:

PSC 1, 2, 4; BSC 1,2,4,5,6,7,8\*  
\*BSC8 in Years 1,5 & 10 if funding is available

### SITE SUMMARY:

The City of Tacoma, in coordination with the Trustees, has developed an estuarine shoreline wetland restoration project on the Middle Waterway within the City of Tacoma and Commencement Bay. Excavation or re-grading of the 1.65 acres vacant upland property, located adjacent to and within the southwest shore of the Waterway should facilitate the establishment of intertidal marsh and riparian buffer bordering one of the few remaining original mudflats within Commencement Bay. The project is intended to create new habitat, enhance existing habitat, buffer both new and existing habitat, and provide public access for education and passive recreation. The project goal is to establish estuarine marsh habitat for an assemblage of wetland dependent marine, bird and plant species. The project is across the head of Middle Waterway from and complements the Middle Waterway Shoreline Restoration Project developed earlier by Simpson Tacoma Kraft Co. in cooperation with the Trustees.

### VOLUNTEER OPPORTUNITIES:

To be defined prior to conducting sampling activities.

**REFERENCE / COMPARISON SITES:** Based upon approval of the Trustee Council, appropriate reference sites will be selected for various sites and various criteria. For example: plant vigor (BSC3) would incorporate comparison data from a site adjacent to Squally Beach along the inner Hylebos mudflat, Elliott Bay monitoring data and data reported for Coastal America sites; Fish (BSC7) sampling results could be compared to historical data gathered by the Puyallup Tribe of Indians in Commencement Bay and the Muckleshoot Indian Tribe in the Duwamish and data gathered at Coastal America sites. Invertebrates (BSC8) inhabiting restored areas could be compared to the Outer Hylebos mudflat - provided that grain size is appropriate. Bird usage (BSC9) could be compared across all sites and include the Duwamish Waterway restoration projects.